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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,346	04/25/2001	Robert Roy Keller JR.	70550	6975

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FITCH EVEN TABIN AND FLANNERY  
120 SOUTH LA SALLE STREET  
SUITE 1600  
CHICAGO, IL 60603-3406

EXAMINER

BROWN, VERNAL U

ART UNIT	PAPER NUMBER
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2635

DATE MAILED: 02/19/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/842,346

Applicant(s)

KELLER ET AL.

Examiner

Vernal U Brown

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This action is responsive to communication filed on November 28, 2003.

#### ***Response to Amendment***

The examiner has acknowledged the amendment of claim 1.

#### ***Response to Arguments***

Applicant's arguments filed April 25, 2001 have been fully considered but they are not persuasive.

Regarding applicant's argument concerning the reference of Tsui not teaching a switch based system the produces multiple codes and associate a particular code with a particular user input, Tsui teaches the output signal of the transmitter is determined by the switches press by the user (col. 6 lines 11-16) which renders the transmitter a switch based transmitter. The selection of the parameters such as modulation and frequency for the transmitted signal implies the transmission of a plurality of signals because each selection of frequency and modulation defines a different signal.

Regarding applicant's argument regarding the setting of a plurality of dip switches rendering the transmitter capable of setting only a single code, the setting of the dip switches does not represent an embodiment of the invention of Tsui but only a recitation of the state of the art at the time of the invention.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4-5, and 8-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsui U.S patent 6249673.

Regarding claim 1, Tsui teaches a transmitter for transmitting a plurality of signals at a plurality of modulations and frequencies (col. 2 lines 54-58) comprising:

a user manipulatable signal configuration input achieved by the selected switch inputs for use by an operator to select signal configuration settings for transmitter signals (col. 6 lines 14-17), plurality of inputs switches (s1-s8, figure 3A); a controller (230) responsive to the signal configuration input for storing the selected signal configurations in memory locations (col. 6 lines 19-22), a plurality of user inputs (switch buttons in figure 3A), apparatus responsive to each user input for retrieving the signal configuration associated therewith (col. 6 lines 19-22); and transmitter circuitry for transmitting the selected signal configuration received from the controller at a predetermined frequency (col. 6 lines 23-26).

Regarding claim 2, Tsui teaches the plurality of user inputs comprises a plurality of user inputs each associated with a stored signal configuration (col. 6 lines 14-17).

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Regarding claim 4, Tsui teaches each of the stored parameter is retrieved by the controller by pressing the corresponding switch (col. 6 lines 14-17). The switch therefore identifies the location of the signal configuration.

Regarding claim 5, Tsui teaches a single transmitter circuit (200) for transmitting the signal.

Regarding claims 8-9, Tsui teaches a method of programming a universal transmitter comprising , setting a signal configuration input to a first set of desired positions corresponding to a first signal configuration, storing the first signal configuration into a first memory location, setting the signal configuration input to a second set of desired positions corresponding to a second signal configuration, storing the second signal configuration into a second memory location, associating one of a plurality of user inputs with each stored signal configuration (col. 6 lines 1-14); and receiving one of the plurality of user inputs and transmitting the stored signal configuration associated therewith (col. 6 lines 15-17).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsui U.S patent 6249673.

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Regarding claim 6, Tsui teaches the transmitter operating at frequencies between 280 MHZ to 450 MHZ but is silent on teaching the transmitter operating at frequencies of 300 MHZ, 310 MHZ and 390 MHZ (col. 5 line 17). One skilled in the art recognizes that the frequencies of 300 MHZ, 310 MHZ and 390 MHZ are in the operable range of 310 MHZ and 390 MHZ.

It would have been obvious to one of ordinary skill in the art to operate the transmitter operating at frequencies of 300 MHZ, 310 MHZ and 390 MHZ in Tsui because Tsui suggests operating the transmitter in the frequency range of 280 MHZ to 450 MHZ and one skilled in the art recognizes that the frequencies of 300 MHZ, 310 MHZ and 390 MHZ are in the operable range of 310 MHZ and 390 MHZ.

Regarding claim 16, Tsui teaches a method of operating a code learning apparatus having a plurality of signal configuration switches, comprising steps of activating a learn mode of the code learning apparatus (col. 6 lines 1-6) and each set of the learnt parameters is retrieved by depressing a corresponding transmit switch (col. 6 lines 14-17) which further indicates the setting or assignment of a combination of the configuration switches to define a code signal configuration. Tsui further teaches storing of the code configuration in memory (col. 6 lines 13-14). Tsui is however not explicit in teaching reading the identified code signal configuration from the configuration switches during the learn mode but one skilled in the art recognizes that it is obvious to read the identified code signal configuration from the configuration switches during the learn mode because the switches are assign to learnt code and use to select the transmitter configuration (col. 6 lines 55-58).

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It would have been obvious to one of ordinary skill in the art to read the identified code signal configuration from the configuration switches during the learn mode in Tsui because Tsui suggests retrieving the learnt code by the switch selection and one skilled in the art recognizes that it is obvious to read the identified code signal configuration from the configuration switches during the learn mode because the switches are assign to learnt code and use to select the transmitter configuration.

Regarding claims 17-18, Tsui teaches the use of switches to set the transmitting parameters of the transmitter (col. 6 lines 14-17) but is not explicit in teaching the combination of the configuration settings comprises a security code. One skilled in the art recognizes the uses of the switches to retrieve the transmitter parameters constitute a measure of security because the transmitter is configurable only by a person who knows the configuration settings of the switches.

It would have been obvious to one of ordinary skill in the art for the combination of the configuration settings comprises a security code in Tsui because Tsui suggests the use of switches to set the transmitting parameters of the transmitter and one skilled in the art recognizes the uses of the switches to retrieve the transmitter parameters constitute a measure of security because the transmitter is configurable only by a person who knows the configuration settings of the switches.

Regarding claim 19, Tsui teaches a code learning apparatus comprises a plurality of user input devices (template transmitter, col. 6 lines 3-4), the method further comprising

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steps of:

identifying one of the user input devices and storing a code signal configuration in a memory location associated with the identified user input device (figure 6).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsui U.S patent 6249673 in view of Fischer et al. U.S patent 5552641.

Regarding claim 7, Tsui teaches the transmitter transmits various codes at different frequencies (col. 2 lines 54-60) but is silent on teaching a first and second transmitter. Fischer et al. in an art related remote control transmitter device teaches a transmitter with a first and second transmitter (col. 5 lines 15-18) in order to facilitate the transmission at various channels.

It would have been obvious to one of ordinary skill in the art for the transmitter to have a first and second transmitter in Tsui as evidenced by Fischer et al. because Tsui suggests the transmitter transmits various codes at different frequencies and Fischer et al. teaches a transmitter with a first and second transmitter in order to facilitate the transmission at various channels.

Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsui U.S patent 6249673 in view of Tsui U.S Patent 6556813.

Regarding claims 3 and 10, Tsui teaches a method of programming a universal transmitter comprising , setting a signal configuration input to a first set of desired positions



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corresponding to a first signal configuration, storing the first signal configuration into a first memory location, setting the signal configuration input to a second set of desired positions corresponding to a second signal configuration, storing the second signal configuration into a second memory location, associating one of a plurality of user inputs with each stored signal configuration (col. 6 lines 1-14); and receiving one of the plurality of user inputs and transmitting the stored signal configuration associated therewith (col. 6 lines 15-17). Tsui is however silent on teaching setting the multi position switches to a second set of positions corresponding to a second configuration position. Tsui (U.S Patent 6556813) teaches the use of the multi-position of multi-point dip switches to select the modulation and code pattern of the transmitter (col. 1 lines 56-65).

It would have been obvious to one of ordinary skill in the art to set the multi position switches to a second set of positions corresponding to a second configuration position in Tsui (U.S patent 6249673) as evidenced by Tsui (U.S Patent 6556813) because Tsui (U.S patent 6249673) suggests using switches to select the desired configuration of the transmitter and Tsui (U.S Patent 6556813) teaches the use of the multi-position of multi-point dip switches to select the modulation and code pattern of the transmitter.

Claim 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsui U.S patent 6249673 in view of Tsui U.S Patent 6556813 and further in view of Allen et al. U.S Patent 6366198.

Regarding claim 11, Tsui teaches the transmitter having a learning mode (figure 6) but is not explicit in teaching the depressing a user input for a predetermined period of time in order to

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place the transmitter in a learn mode. Allen et al. in an art related transmitter device invention teaches transmitter entering a learning mode depressing a user input for a predetermined period of time in order to place the transmitter in a learn mode (col. 3 lines 44-47).

It would have been obvious to one of ordinary skill in the art to depress a user input for a predetermined period of time in order to place the transmitter in a learn mode in Tsui as evidenced by Allen et al. because Tsui suggests placing the transmitter in a learning mode and Allen et al. teaches a method of placing a transmitter in a learning mode by depressing a user input for a predetermined period of time.

Regarding claims 12-15, Tsui (U.S patent 6249673) teaches the switch settings are used to identify the selected transmitter to be emulated, the code format, the modulation format and the transmission frequency (col. 6 lines 1-20).

Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsui U.S patent 6249673 over Heitschel et al. U.S Patent 4750118.

Regarding claim 20, Tsui teaches learning apparatus comprising a template transmitter (col. 6 lines 1-3). Tsui further teaches the transmitter operating in the radio frequency range (col. 5 line 17) but is silent on teaching identifying one of the user input devices during a transmit mode reading from the memory the code signal configuration associated with the identified user input device; and transmitting a signal in accordance with the code signal configuration read from the memory. Heitschel et al. in an art related invention in the same field of endeavor of transmitters teaches a learning apparatus(41) comprising a method of identifying one of the user

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input devices during a transmit mode (col. 3 lines 9-12) and transmitting a signal in accordance with the code signal configuration read from the memory (col. 3 lines 65- col. 4 line 5).

It would have been obvious to one of ordinary skill in the art to identify one of the user input devices during a transmit mode reading from the memory the code signal configuration associated with the identified user input device; and transmitting a signal in accordance with the code signal configuration read from the memory in Tsui as evidenced by Heitschel et al. because Tsui suggests a learning apparatus for learning transmitter code in memory and Heitschel et al. teaches a learning apparatus(41) comprising a method of identifying one of the user input devices during a transmit mode (col. 3 lines 9-12) and transmitting a signal in accordance with the code signal configuration read from the memory in order to enable an learning apparatus to learn various transmitter.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vernal U Brown whose telephone number is 703-305-3864. The examiner can normally be reached on M-Th, 8:30 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.



Vernal Brown  
February 10, 2004

**MICHAEL HORABIK**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**

